

IN THE CLAIMS

Please amend the claims as follows:

1. (currently amended) A method for translating data packets from one network protocol to another, said method comprising:

~~constructing a plurality of translation templates;~~

~~storing a loading said~~ plurality of translation templates into a translation template cache;

in response to a data packet from a first network arriving at a translation router, selecting an appropriate one of said plurality of translation templates from said translation template cache according to ~~the translation context of~~ an incoming port number from which said data packet comes;

generating a new header for transmission into a second network by reading header fields of said data packet from said first network along with said appropriate one of said plurality of translation templates in said translation template cache;

removing data payload of said data packet ~~from said first network~~ from its header;

appending said removed data payload ~~of said data packet~~ to said ~~constructed~~ new header to form a new data packet for said second network; and

transmitting said new data packet to said second network.

2. (original) The method of Claim 1, wherein said plurality of translation templates includes translation templates for Fibre Channel, translation templates for Ethernet and translation templates for InfiniBand.

3. (original) The method of Claim 1, wherein said translation template cache is a dedicated on-chip memory.

4. canceled.

5. (currently amended) The method of Claim 1, wherein said generating further includes generating said new header for transmission into said second network according to an outgoing port number to which said data packet is to be transmitted.

6. (currently amended) An apparatus for translating data packets from one network protocol to another, said apparatus comprising:

~~means for constructing a plurality of translation templates;~~

a translation template cache ~~means for loading said~~ storing a plurality of translation templates into a translation template cache;

a translator router, in response to the receipt of a data packet from a first network ~~arriving into a translation router~~, means for selecting an appropriate one of said translation templates from said translation template cache according to ~~the translation context of an~~ incoming port number from which said data packet comes;

means for generating a new header for transmission into a second network by reading header fields of said data packet from said first network along with said appropriate one of said translation templates in said translation template cache;

means for removing data payload of said data packet ~~from said first network~~ from its header;

means for appending said removed data payload ~~of said data packet~~ to said ~~constructed~~ new header to form a new data packet for said second network; and

means for transmitting said new data packet to said second network.

7. (currently amended) The apparatus of Claim 6, wherein said ~~wherein said~~ plurality of translation templates includes translation templates for Fibre Channel, translation templates for Ethernet and translation templates for InfiniBand.

8. (currently amended) The apparatus of Claim ~~11~~ 6, wherein said translation template cache is a dedicated on-chip memory.

9. canceled.

10. (currently amended) The apparatus of Claim ~~11~~ 6, wherein said means for generating further includes means for generating said new header for transmission into said second network according to an outgoing port number to which said data packet is to be transmitted.

11. (currently amended) A computer readable medium having a computer program product ~~residing on a computer usable medium~~ for translating data packets from one network protocol to another, said computer readable medium ~~program product~~ comprising:

~~program code means for constructing a plurality of translation templates;~~

computer program code ~~means for loading said~~ storing a plurality of translation templates into a translation template cache;

in response to a data packet from a first network arriving into a translation router, computer program code ~~means~~ for selecting an appropriate one of said translation

templates from said translation template cache according to ~~the translation context of an~~
incoming port number from which said data packet comes;

computer program code ~~means~~ for generating a new header for transmission into a second network by reading header fields of said data packet from said first network along with said appropriate translation template in said translation template cache;

computer program code ~~means~~ for removing data payload of said data packet ~~from~~
said ~~first network~~ from its header;

computer program code ~~means~~ for appending said removed data payload ~~of said~~
~~data packet~~ to said ~~constructed~~ new header to form a new data packet for said second network; and

computer program code ~~means~~ for transmitting said new data packet to said second network.

12. (currently amended) The computer readable medium ~~program-product~~ of Claim 11, wherein said plurality of translation templates includes translation templates for Fibre Channel, translation templates for Ethernet and translation templates for InfiniBand.

13. (currently amended) The computer readable medium ~~program-product~~ of Claim 11, wherein said translation template cache is a dedicated on-chip memory.

14. canceled.

15. (currently amended) The computer readable medium ~~program-product~~ of Claim 11, wherein said computer program code ~~means~~ for generating further includes computer program code ~~means~~ for generating said new header for transmission into said second network according to an outgoing port number to which said data packet is to be transmitted.